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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/042,632

01/11/2002

Thomas M. Holman

4310

7590

01/09/2004

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EXAMINER

SNIDER, THERESA T

ART UNIT

PAPER NUMBER

1744

DATE MAILED: 01/09/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/042,632

Applicant(s)

HOLMAN ET AL.

Examiner

Theresa T. Snider

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 17 November 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-15 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-15 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
- a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Claim Rejections - 35 USC § 112

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 1-15 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Exemplary of such:

Claim 1, line 2, 'having an open end and a closed end' should be inserted after 'filters';

Line 2, 'said filter having an open end and a closed end' should be deleted;

Line 7, 'Means' should be replaced with 'means';

Line 8, 'said'(first occurrence) should be deleted;

Line 8, 'adjustably supporting the means for' should be inserted after 'for';

Line 8, 'is adjustably supported' should be deleted;

Line 12, should 'means for lateral moving said means for' be inserted after 'for'?

Isn't the means for jetting within the chamber but the means for moving it located outside the chamber?

Claim 3, line 1, 'wherein' should be inserted after 'claim 1,';

Line 1, 'including' should be deleted;

Line 3, would 'type' be more appropriately replaced with 'shaped'?

Claim 4, line 2, 'j tting' should be replaced with 'jetting';

Line 3, 'circumferential surface' should be replaced with 'circumference'.

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Claim 6, line 1, '3' should be replaced with '1'.

Claim 7, line 5, 'laterally' should be replaced with 'lateral'.

Claim 11, line 2, 'having an open and a closed end' should be inserted after 'filter';

Line 3, 'being' should be deleted;

Line 3, 'sealed' should be replaced with 'sealing it';

Line 3, 'said filter having an open end and a closed end' should be deleted;

Line 7, 'rotating' should be deleted;

Line 10, 'rotating' should be deleted;

Line 10, 'means for reciprocating laterally' should be inserted after 'filter,';

Line 10, 'is reciprocating laterally' should be deleted.

Claim 12, line 2, 'means for' should be inserted after 'said'.

Claim 14, line 3, 'inner' should be inserted after 'said';

Claim 15, line 3, 'an' should be replaced with 'the'.

Claim Rejections - 35 USC § 103

3. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

4. Claims 1-2, 5 and 9-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Means, Jr. in view of Grotto.

Means, Jr. discloses a similar filter cleaning apparatus however fails to disclose a rotating cup for supporting a filter.

Means, Jr. discloses an enclosed cleaning chamber (fig. 1, upper 'box').

Means, Jr. discloses means within the chamber for rotatably supporting a filter (fig. 1, #50,46). Grotto discloses a filter cleaning apparatus having a freely rotating cup and cone-shaped element for rotatably supporting a filter within a cleaning chamber (fig. 2, #53,33). It would have been obvious to one of ordinary skill in the art to provide the support means of Grotto in Means, Jr. to allow for the most secure engagement of a filter that has an open top.

Means, Jr. discloses a means for driving the supporting elements (fig. 1, #70).

Means, Jr. discloses means for movably jetting air onto the outer circumference of a filter (col. 3, lines 44-47 and col. 4, lines 1-4).

Means, Jr. discloses the moving means being located outside of the cleaning chamber (fig. 1, lower 'box').

With respect to claim 2, Means, Jr. discloses the means for jetting air being two jets that are slanted downwardly and forwardly of the filter (fig. 9, #105,104).

With respect to claim 5, it would have been obvious to one of ordinary skill in the art to determine the most appropriate, known mechanical system in Means, Jr. to move the means for jetting to allow for the most effective traveling of the means along the filter.

5. Claims 1-2 and 5 are rejected under 35 U.S.C. 103(a) as being unpatentable over McKay et al. in view of Grotto.

McKay et al. discloses a similar filter cleaning apparatus however fails to disclose a rotating cup for supporting a filter.

McKay et al. discloses an enclosed cleaning chamber (fig. 2, #5).

McKay et al. discloses means within the chamber for rotatably supporting a filter (fig. 2,

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#9). Grotto discloses a filter cleaning apparatus having a freely rotating cup and cone shaped element for rotatably supporting a filter within a cleaning chamber (fig. 2, #53,33). It would have been obvious to one of ordinary skill in the art to provide the support means of Grotto in McKay et al. to allow for the most secure engagement of a filter that has an open top.

McKay et al. discloses a means for driving the supporting elements (fig. 2, #13).

McKay et al. discloses means for movably jetting air onto the outer circumference of a filter (col. 5, lines 37-39 and lines 64-66).

McKay et al. discloses the moving means being located outside of the cleaning chamber (fig. 1, #13,34).

With respect to claim 2, McKay et al. discloses the means for jetting including two air jets that are slanted downwardly and forwardly of the length of the filter (fig. 2, #37,38).

With respect to claim 5, it would have been obvious to one of ordinary skill in the art to determine the most appropriate, known mechanical system in McKay et al. to move the means for jetting to allow for the most effective traveling of the means along the filter.

6. Claims 11 and 13-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Grotto in view of McKay et al..

Grotto discloses a similar filter cleaning apparatus however fails to disclose means for supplying compressed air onto an outside of a filter.

Grotto discloses an inner cleaning chamber (fig. 2, #10).

Grotto discloses a means for rotating a filter within the chamber (col. 3, lines 37-38).

Grotto discloses means for inducing a negative pressure within the chamber (col. 3, lines 45-47).

Grotto discloses means for inducing a positive pressure within the filter (col. 3, lines 47-51).

McKay et al. discloses a filter cleaning apparatus having means for supplying compressed air onto an outside of a filter (fig. 2, #37,38). It would have been obvious to one of ordinary skill in the art to provide the means for supplying air of McKay et al. in Grotto to ensure for the most effective removal of dirt from the surface of the filter.

With respect to claim 13, McKay et al. discloses means for moving the means for supplying air along the length of the filter (fig. 2, #34).

With respect to claim 14, McKay et al. discloses a means for rotating filter and the means for driving the means for supplying air being located outside of the cleaning chamber (fig. 2, #34,15). It would have been obvious to one of ordinary skill in the art to provide the means for rotating of Grotto on the outside of the chamber, as disclosed in McKay et al. to allow for ease in access by an operator without disassembling the apparatus.

With respect to claim 15, McKay et al. discloses means for adjusting the means for supplying air (col. 5, lines 64-66).

Allowable Subject Matter

7. Claims 3-4, 6-10 and 12 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, second paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

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1. The following is a statement of reasons for the indication of allowable subject matter:

The prior art discloses a filter cleaning apparatus having a cone-shaped element and rotating cup for supporting a filter, a means for jetting air onto the outer circumference of the filter and means for moving the jetting means along the length of the filter HOWEVER fails to disclose or fairly suggest the means for adjusting the jetting means including a parallelogram shaped element to keep the jetting means at a top dead center of the filter regardless of the diameter of the filter OR the means for moving the means for jetting air including two plates which are movable relative to each other and carry the means for jetting at a downward end, the plates have means for arresting the plates relative to each other and relative to the outer circumference of the filter OR the means for jetting air having an upper support plate at an upper end thereof, the plate extending through a means for the interior of the cleaning chamber from the outside, the upper plate being mounted on a slidable carriage constituting the means for moving the means for jetting air OR the rotating cup being supported on a backup plate that has means for roughly adjusting the plate to any given filter length.

Response to Arguments

2. Applicant's arguments filed 11/17/2003 have been fully considered but they are not persuasive. Applicant urges that Means, Jr. does not disclose the means for driving being located outside of the enclosed chamber. This argument is not persuasive because Means, Jr. discloses the cleaning chamber as the upper box of figure 1 (col. 2, lines 37-46). Means, Jr. discloses the lower box housing the means for driving (fig. 1, #70). With respect to the means for jetting air not being in the enclosed chamber, this is believed to be an invalid argument. Page 7 of

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Applicant's specification and claim 1, line 8, specifically disclose the means for jetting being within the chamber.

Applicant urges that Grotto does not show a rotatable cup. This argument is not persuasive because though Grotto discloses #33 as a platform, from figure 2, one can see that it has sidewalls that would constitute a cup.

Applicant urges that Grotto does not disclose a filter with a closed end. This is not deemed persuasive because Grotto discloses that one can have filters with a closed end (col. 3, lines 31-32). Does Applicant intend to claim the filter with the apparatus for cleaning?

Conclusion

3. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Theresa T. Snider whose telephone number is (571) 272-1277.

The examiner can normally be reached on Monday-Wednesday-Friday (6:30AM-3:00PM).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robert J. Warden can be reached on (571) 272-1281. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (571) 272-1300.

rs.552 .

1/05/2004

Theresa T. Snider
Primary Examiner
Art Unit 1744